

U.S. EPA Region 4 Air Quality Update

**Environmental Show of the South
Chattanooga, TN
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Plans for FY18 and Beyond

The new 2018-2022 Strategic Plan charts the course for advancing EPA's priorities and mission to protect human health and the environment



<https://www.epa.gov/planandbudget>



Air Quality Trends

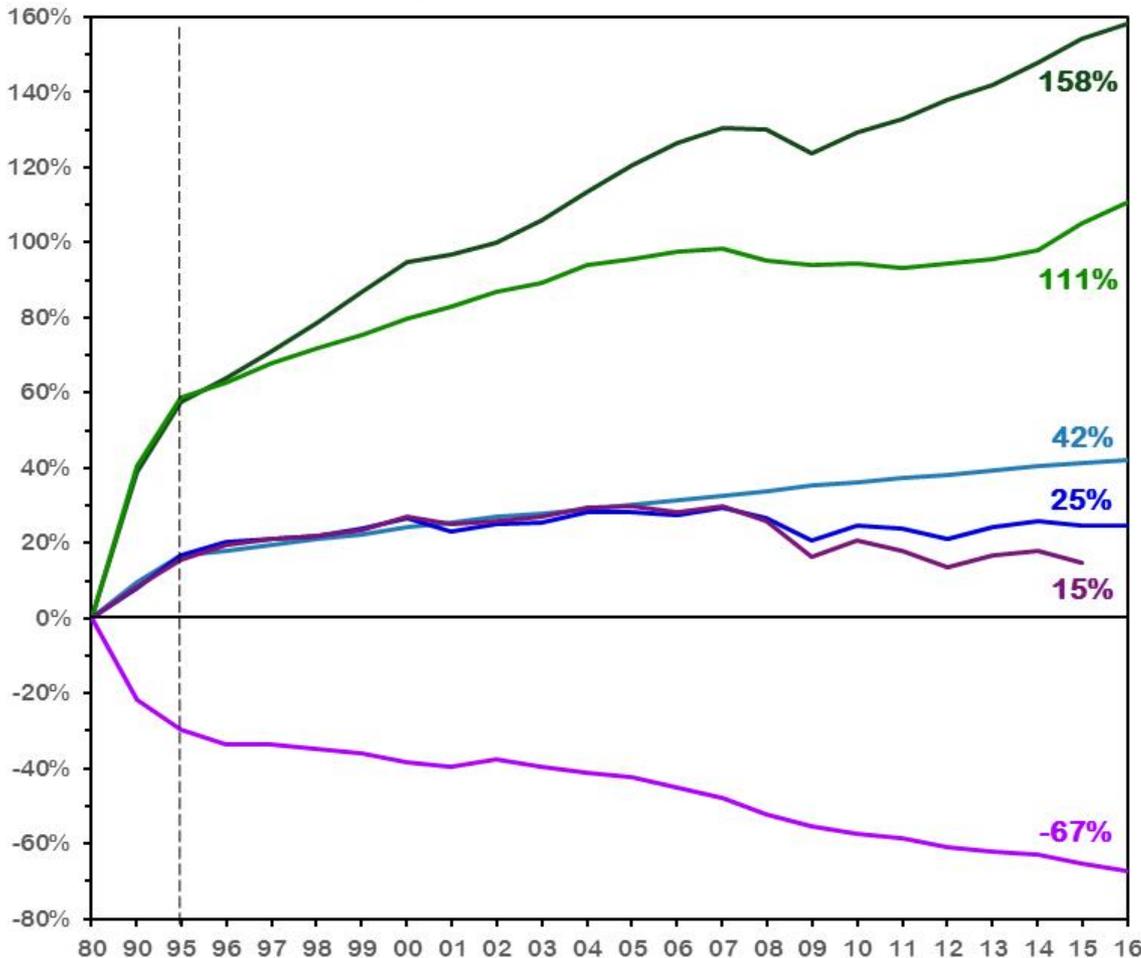
- Comparison of Growth vs Emissions, 1980-2016
- National Emissions Inventory
- 2012-2016 Region 4 TRI (Air Releases Only)





Comparison of Growth vs Emissions

Comparison of Growth Areas and Emissions, 1980-2016



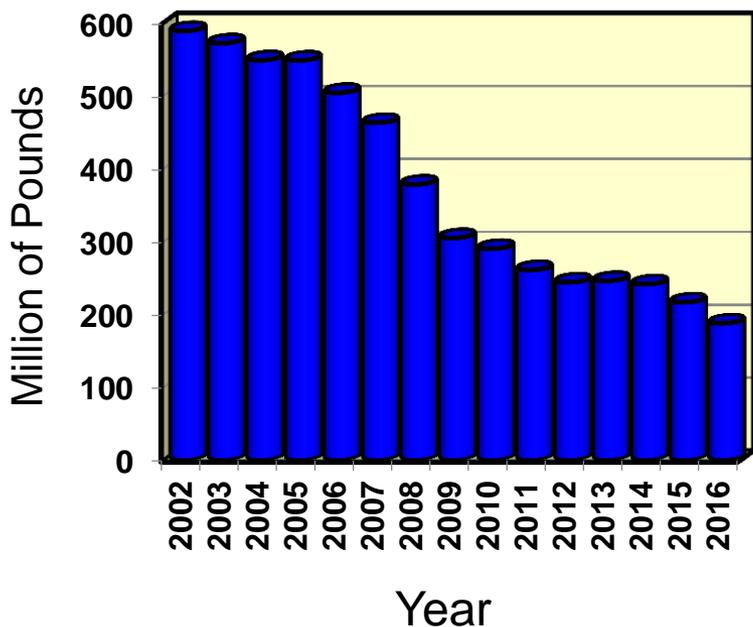
-  **Gross Domestic Product**
-  **Vehicles Miles Traveled**
-  **Population**
-  **Energy Consumption**
-  **CO₂ Emissions**
-  **Aggregate Emissions (Six Common Pollutants)**



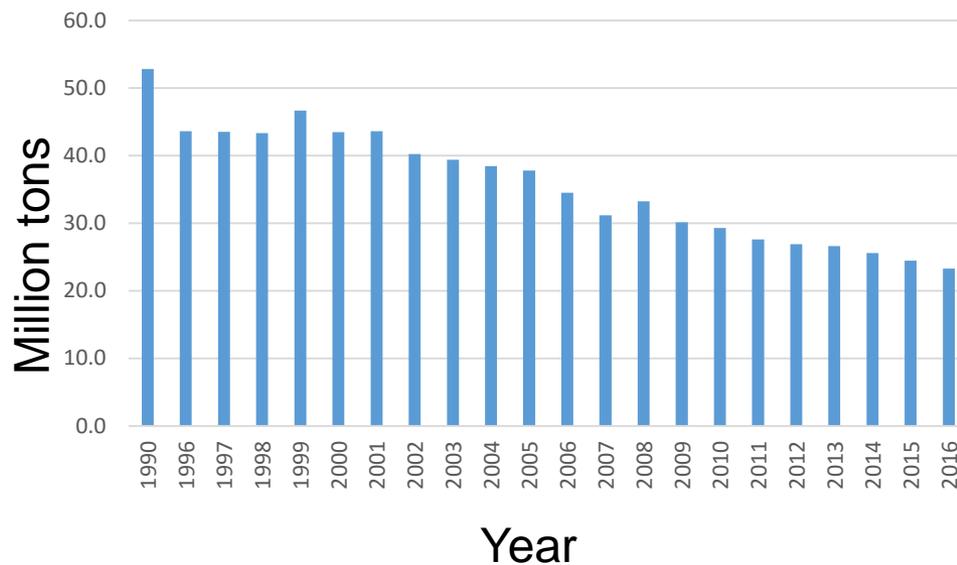
Emissions Have Reduced

REGION 4

TRI (Air Emissions)



Criteria Pollutant Emissions*



*NOX, SO2, CO, VOC, NH3, PM2.5 and PM10

www.epa.gov/air-emissions-inventories/national-emissions-inventory-nei
And
www.epa.gov/tri



Air Quality Punchline

- Region 4 is the most populous region in the USA with the second largest land area.
- Out of 223 nonattainment areas nationally, Region 4 has 10.



Southeast Diesel Collaborative (SEDC)

- Voluntary public/private partnership formed in 2006 (part of the National Clean Diesel Campaign), focused on clean diesel opportunities that incorporate Energy, the Environment and Economics
- Diverse Partners from government, industry, state/local groups with the goal of improving air quality and public health by reducing emissions from existing diesel engines
- Annual funding under the Diesel Emissions Reduction Act (DERA)
- 13th Annual Partners Meeting will be held the week of September 24, 2018, in Charleston, SC



www.southeastdiesel.org



National Enforcement Initiatives

- Reducing Air Pollution from the Largest Sources
- Cutting Hazardous Air Pollutants
- Ensuring Energy Extraction Activities Comply with Environmental Laws
- Reducing Risks from Accidental Releases at Industrial and Chemical Facilities (New FY17-19)
- Reducing Hazardous Air Emissions from Hazardous Waste Facilities (New FY17-19)
- Keeping Raw Sewage and Contaminated Stormwater Out of Our Nation's Waters
- Preventing Animal Waste from Contaminating Surface and Ground Water
- Keeping Industrial Pollutants Out of the Nation's Waters

<https://www.epa.gov/enforcement>



Disaster Preparedness and Response

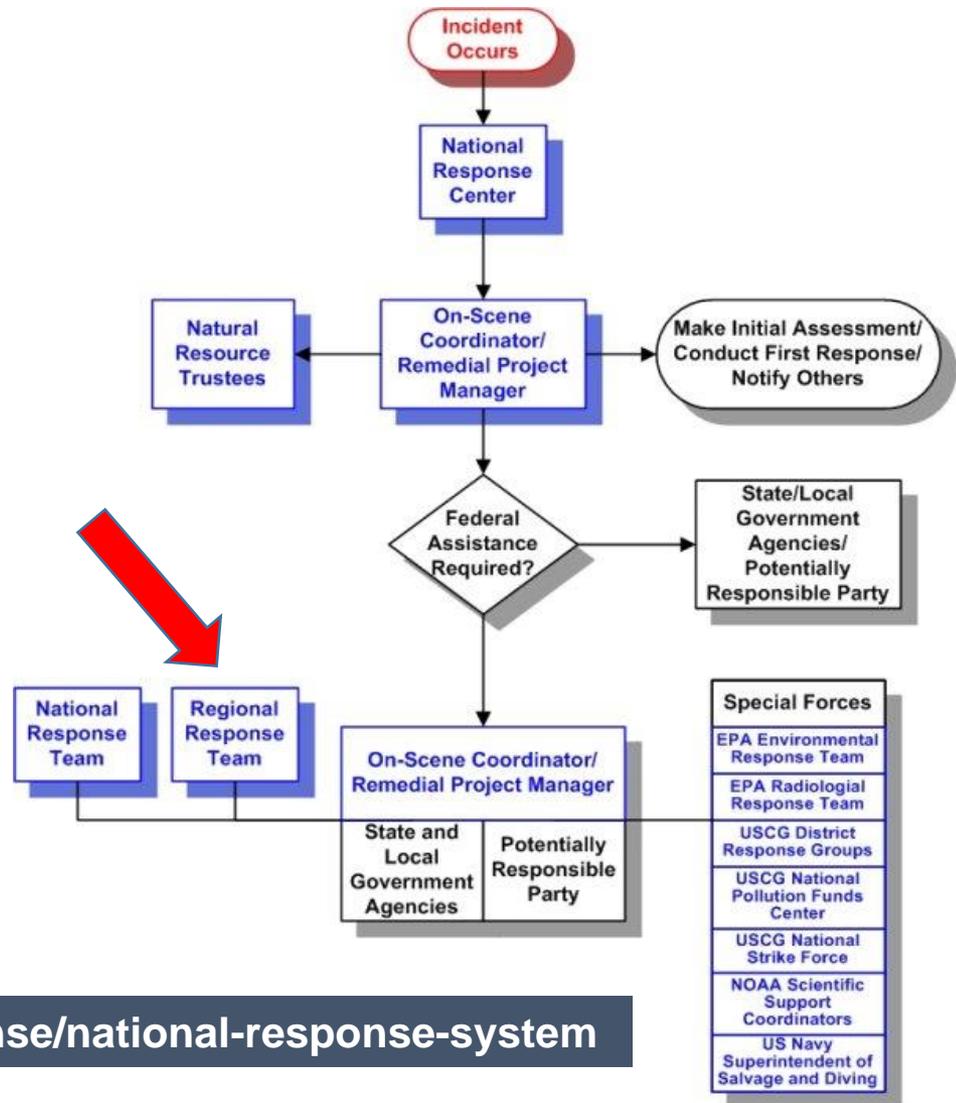
- National Organization
- Regional Organization and Activities





National Response System

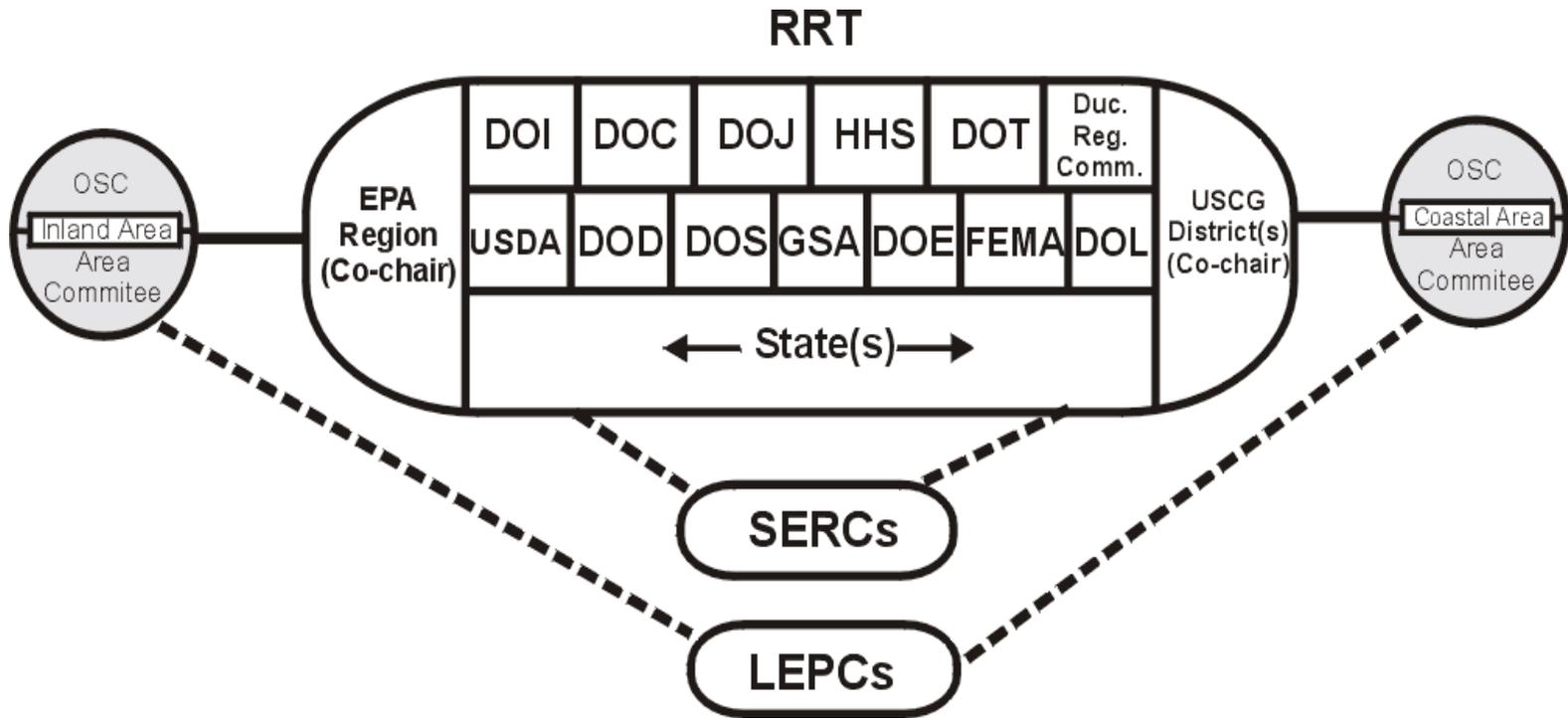
The National Response System (NRS) is a mechanism routinely and effectively used to respond to a wide range of oil and hazardous substance releases



<https://www.epa.gov/emergency-response/national-response-system>



Regional Response Team



- R4 States are members of the Regional Response Team (RRT)
 - RRT provides coordination between USEPA, USCG, State and other Federal agencies
 - Meet twice a year to discuss response issues

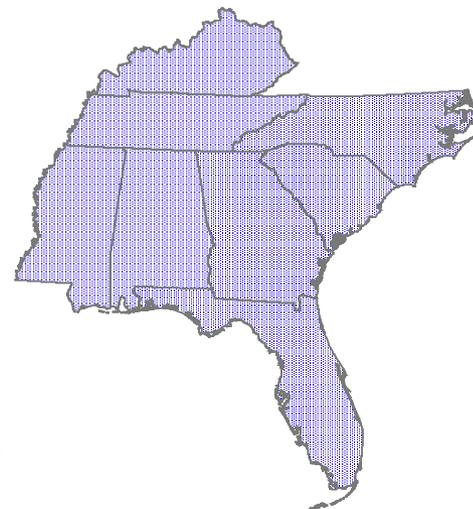


EPA Region 4 at a Glance

- 357,000 square miles
- 2,000 miles of coastline
- Eight states and 736 counties
- 71 Metropolitan Statistical Areas (MSAs)
- Over 65,000,000 people
- Major center of:
 - Manufacturing
 - Fossil fuel distribution
 - Transportation of goods, including numerous ports

Examples of R4 Natural & Man-made Disasters

Hurricane Irma - 2017
Tennessee Wildfires - 2016
BP Oil Spill – 2010
TVA Kingston Coal Ash Spill -2008
Hurricane Katrina - 2005





R4 Preparedness/Response Activities on Many Fronts

- Emergency response to oil and hazardous substance releases
- Oil facility inspection
- Stafford Act deployments
- CAA Risk Management Plan (RMP) Program (1681 RMP facilities in R4) and EPCRA Programs (44,000 facilities in R4 report hazardous chemical inventories)
- Special Events (e.g., G8 Summit, Superbowls)
- Backup support to EPA R3 and R5
- Mutual aid support to U.S. Coast Guard
- EPA's Radiological Emergency Response Team (RERT) works with federal, state and local agencies to monitor radioactivity and clean up affected areas



<https://www.epa.gov/emergency-response>



Capabilities

- **Internal**

- Response Support Corp
- SESD Lab can provide sampling and analysis assistance

- **External**

- Can draw on other Regions with HQ coordination
 - R4 has a Agreement with R5 and R3 for cross boundary support

- **Numerous Special Teams (in R4 and Externally)**

- Environmental Response Team (Las Vegas, Cincinnati, Erlanger)
- Radiological Emergency Response Team (Montgomery, AL)
- National Decontamination Team (Biological, Radiological, Chemical)
- US Coast Guard Gulf Strike Team (Mobile, AL)
- R4 Air Monitoring Team
- R4 Fuel Waiver Team
- R4 Asbestos Team
- Etc.



Recent Example – 2017's Hurricane Irma



Hurricane Irma
 Friday September 08, 2017
 5 PM EDT Advisory 39
 NWS National Hurricane Center

Current information: x
 Center location 22.1 N 76.5 W
 Maximum sustained wind 155 mph
 Movement W at 12 mph

Forecast positions:
 ● Tropical Cyclone ○ Post/Potential TC
 Sustained winds: D < 39 mph
 S 39-73 mph H 74-110 mph M > 110 mph

Potential track area:
 Day 1-3 Day 4-5

Watches:
 Hurricane Trop Stm

Warnings:
 Hurricane Trop Stm

Current wind extent:
 Hurricane Trop Stm



Hurricane Irma – Region 4 Activities

- Prior to landfall, RA offered assistance to 4 states and potentially impacted tribes; FL requested assistance
- Deployed/provided:
 - On Scene Coordinator to provide direct coordination and planning support to the State
 - Liaison to the FEMA Regional Response Coordination Center
 - EPA regional senior leaders to south Florida
- Positioned 12 Field Hazard Assessment Teams for deployment when and where needed





Hurricane Irma – Region 4 Activities

- Water and wastewater systems technical support
 - Coordinated with FL to monitor status of >1,600 Community Drinking Water Systems and >2,000 wastewater systems
 - Contacted 1,255 small non-community drinking water systems, such as schools and restaurants
- Provided support for:
 - Orphan container assessment and recovery (collected >700)
 - vessel pollution response and mitigation (at 65 sunken/grounded vessels)
 - Debris management
- Boots-on-the-ground assessments of Superfund sites in FL, GA, SC, and AL
- Assessed status of all 310 oil storage facilities required to maintain Facility Response Plans within FL, GA, AL, and SC and all 274 RMP facilities in FL



Emergency Fuel Waivers

- Under limited circumstances, federal fuel requirements can be waived per CAA section 211(c)(4)(C)
- Waivers are requested by or on behalf of a Governor and can only be issued by the EPA Administrator with concurrence from DOE
 - An “extreme and Unusual” circumstance must exist
 - Applies to the smallest geographic area necessary
 - Waivers are issued for 20 days (or less)
- During the 2017 hurricane season, EPA issued **six fuel waivers and extensions** for areas within R4

<https://www.epa.gov/enforcement/fuel-waivers>



Who are the States' Contacts for Environmental Emergencies

For Immediate Emergencies (Spills, Explosions, etc.)

- The “State Warning Post”
(usually the State EMA or State EPA)
- The National Response Center
(NRC)

For Anticipated Emergencies (e.g., approaching hurricane)

- The State Representative to
FEMA (usually the State EMA)





States Contacts for Environmental Emergencies

Fuel Waivers

- During normal business hours
 - Call EPA Air Enforcement Division, at 202-564-2260, or the Compliance Division (Kurt Gustafson at 202-403-4419 or gustafson.kurt@epa.gov and Madison Le at 202-507-3062 or le.madison@epa.gov).
- After hours
 - Call EPA Emergency Operations Center, at 202-564-3850

No Action Assurance Letters

EPA policy allows the Agency to issue no action assurances in cases where it is necessary to avoid extreme risks to public health and safety and where no other mechanism can adequately address the matter.

- Coordinate through your EPA Regional Enforcement Program



Questions?

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